Caltrans Corridor Planning Guidebook

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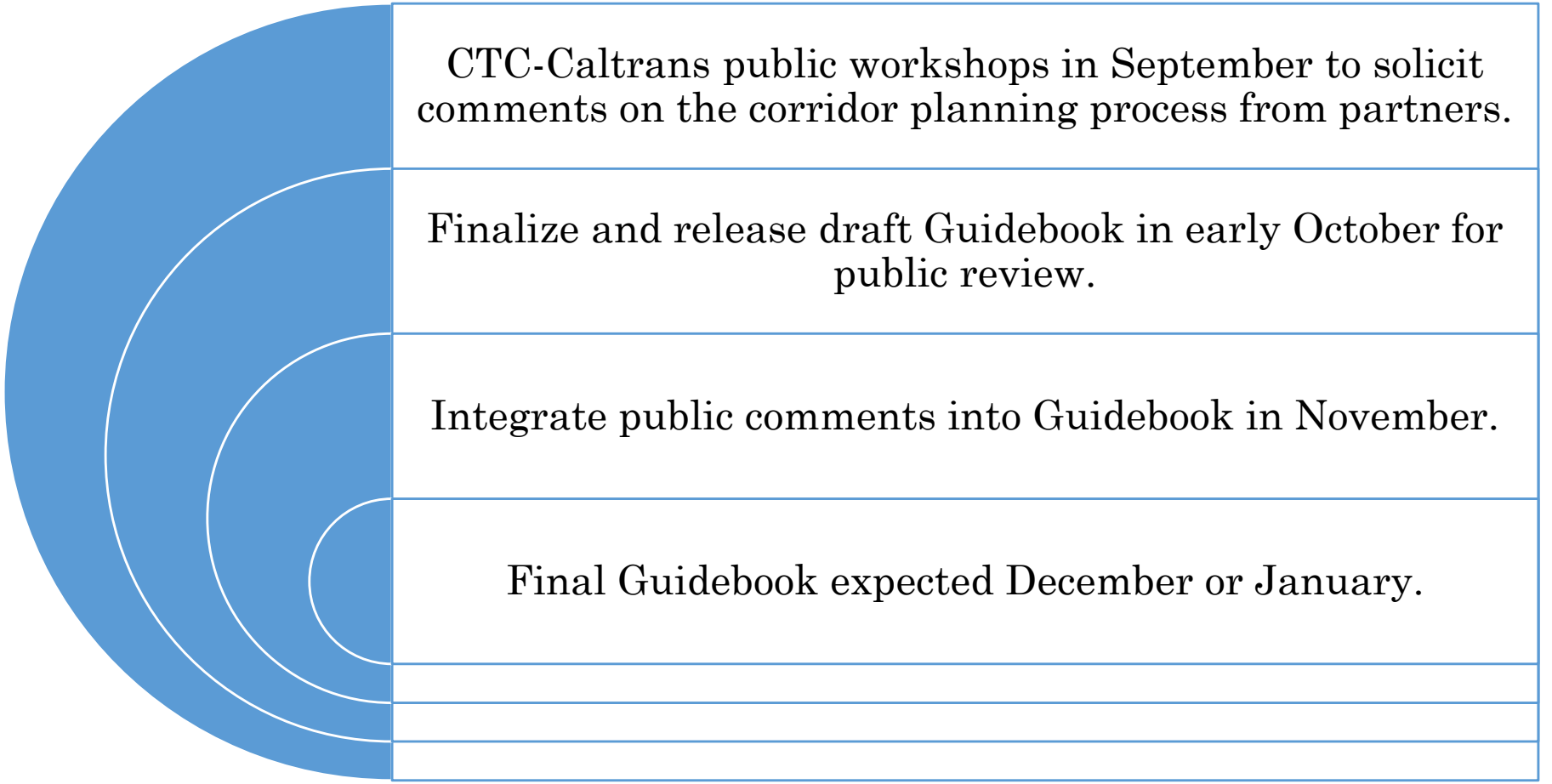
Corridor Planning Guidebook Status

- We are working on a Draft Corridor Planning Guidebook.
- We are incorporating feedback from the July CTC-Caltrans Workshops before being released.
- A “public discussion draft” is intended to be released in a timely manner after the September workshops to provide opportunity to further align the Guidebook with comments received at the workshops.
- The goal is to align the Guidebook with the CTC Guidelines.

Corridor Planning Guidebook Schedule



Discussion Topics

The following are discussion topics to solicit input on key corridor planning elements:

1. What is a corridor? How do we define it?

2. Do we have the correct Emphasis Areas (discussed later in this presentation)?

3. Provide input on the mechanisms of partnering – how should we best coordinate efforts?

Policy - Process - Product

Policies come from existing plans and other sources like legislation for example, that give direction, strategies, goals, and targets.

Process is the how-to guide to complete products. The corridor planning guidebook is the how-to for corridor planning.

Product is the outcome of the process, a comprehensive corridor plan that represents a sustainable framework of needs.

Guidebook Elements

The following are the major sections of the Guidebook.

State, Regional, and Local **Corridor Planning Policy Framework**

Eight-Step **Corridor Planning Process**

Key **Corridor Planning Emphasis Areas**

Corridor Planning Policy Approach

Collaboration and Communication

Identify and Prioritize Corridors

Multi-disciplinary and Multi-organizational Corridor Team

State, Tribal, Regional, and Local Plans - Asset Management (SHOPP)

Leverage Funding

What is a Corridor?

The following is an example of a definition from a USDOT sponsored paper:

- "A largely linear geographic band defined by existing and forecasted travel patterns involving both people and goods. The corridor serves a particular travel market or markets that are affected by similar transportation needs and mobility issues. The corridor includes various networks (e.g., limited access facility, surface arterial(s), transit, bicycle, pedestrian pathway, waterway) that provide similar or complementary transportation functions. Additionally, the corridor includes cross-network connections that permit the individual networks to be readily accessible from each other. The term "network" is used to denote a specific combination of facility and mode."

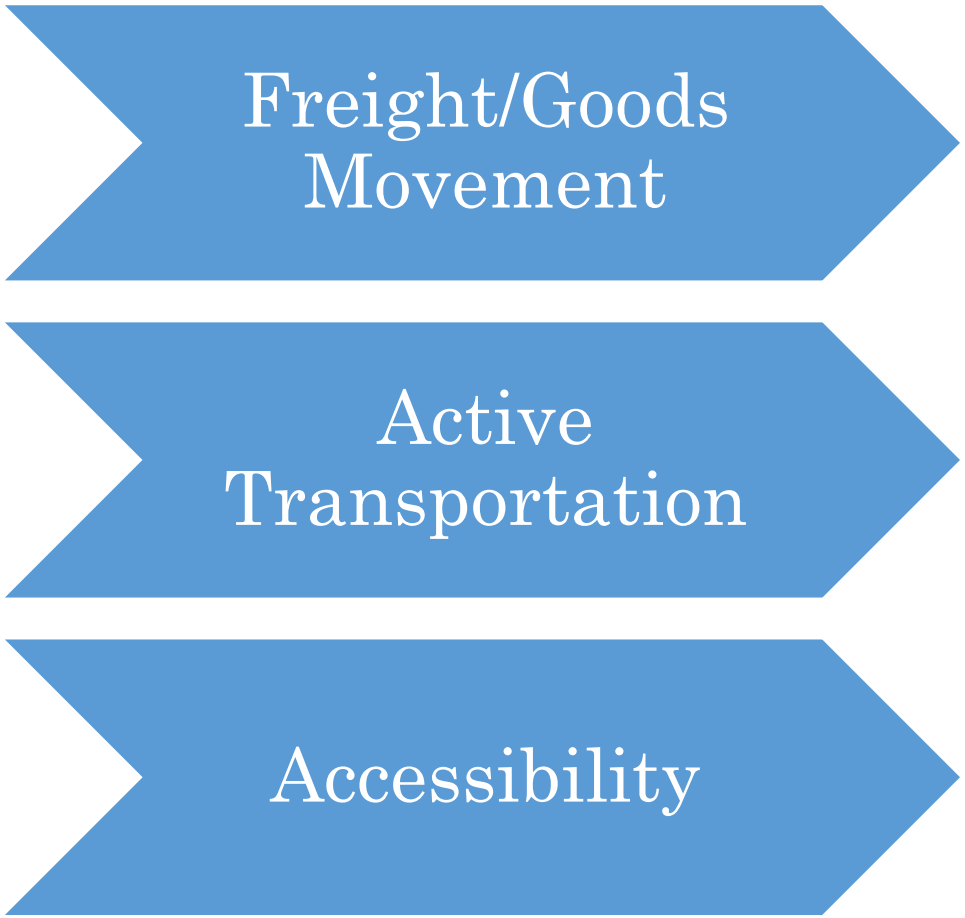
Corridor Planning Emphasis Areas

Throughout the Corridor Planning process there must be equal and equitable consideration of issues that address transportation system performance and quality of life.

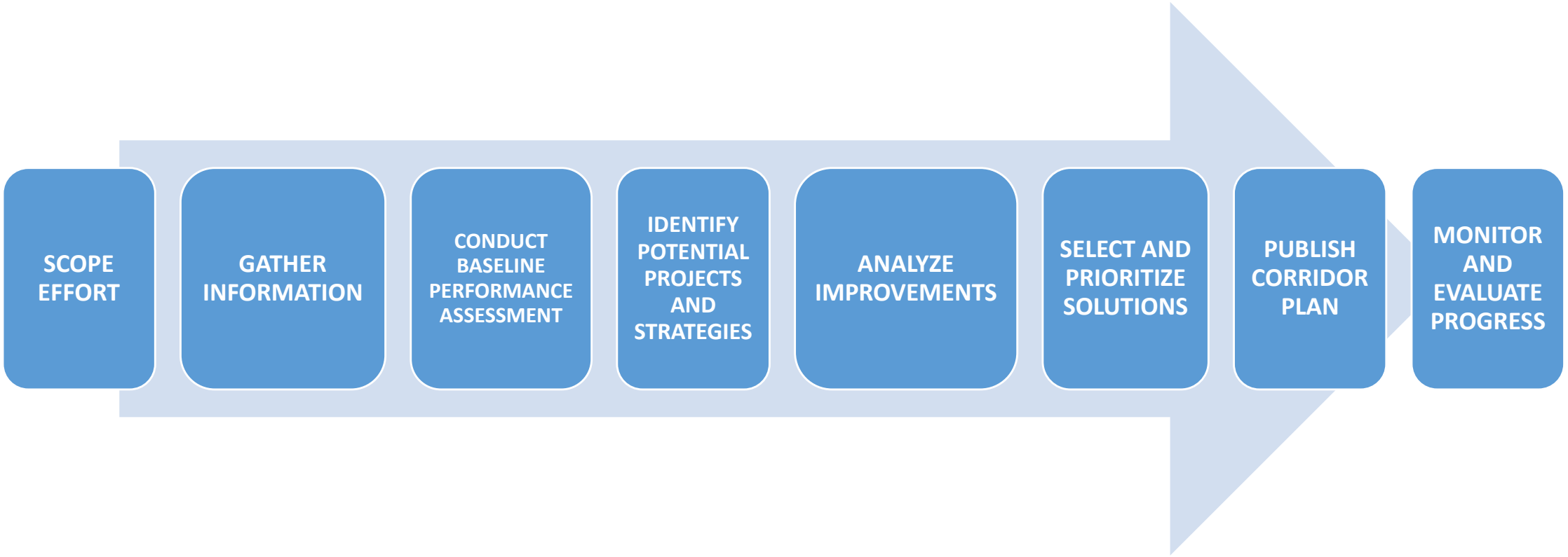
21 Emphasis Areas

- **Accessibility**, **Active Transportation**, Asset Management, **Broadband**, Climate Change, Connected & Automated Vehicles, Emerging Technologies, Environmental, **Freight & Goods Movement**, Health, Housing Land Use & Place Types, Livability, Multimodal Integration, Safety & Worker Safety, Smart Highways/Infrastructure, Smart Mobility, Sustainability, System Operations and Performance, Transit and Passenger Rail, Transportation System Management and Operations, Zero Emission Vehicles, etc.

Emphasis Area Examples



Corridor Planning Process



Key Corridor Plan Elements

- ✓ Demonstrate Caltrans and Regional/Local partnership
- ✓ Short, medium and long-term planning horizon (up to 25 years)
- ✓ Identifies specific corridor objectives
- ✓ Considers multimodal approaches to address system deficiencies
- ✓ Evaluates performance impacts of recommended projects and strategies
- ✓ Considers a range of performance metrics
- ✓ Recommends and prioritizes improvements that feed into Caltrans System Planning processes, transportation funding programs and the regional transportation planning process
- ✓ Consistent with the principles of the federal Congestion Management Process
- ✓ Informed by the principles of the California Transportation Plan (CTP) and Caltrans' Smart Mobility Framework

Travel Analysis Tool Selection

- Range of Analysis Tool Options: Sketch Planning to Micro-simulation
- Travel Demand Models, Macro- and Meso-level tools, specialized tools

ANALYSIS CHARACTERISTICS

Study Type

Planning
Design
Transportation Management Plan
Operations
Evaluation

Analysis Horizon

Short Term (1-4 years)
Medium Term (5-10 years)
Long Term (Up to 25 years)

Analysis Timeframe

Daily
Peak Period
Peak Hour
< One Hour

RESOURCE CONSIDERATIONS

Time

Time Available for Study

People

Knowledge
Skills
Ability
Availability

Data

Accuracy/ Quality
Availability
Dynamics
Resources Available for Additional Data

Tools

Availability
Cost
Visualization Capabilities
Processing/ Run-Time
Ease of Use
Precision/ Accuracy Requirements
User Support
Well - Trusted

ANALYSIS CHARACTERISTICS

Geographic Area

- Urban/ Suburban
- Rural

Geographic Size

- Isolated Location
- Segment
- Corridor
- Small Region
- Large Region

Travel Mode

- Single Occupancy Vehicle
- High Occupancy Vehicle (2, 3, 3+)
- Truck
- Shared Ride
- Low/No Emissions Vehicle
- Connected/ Autonomous Vehicle
- Motorcycle
- Bus
- Rail
- Bicycle
- Pedestrian

Improvement Strategy

- Roadway Infrastructure
- Roadway Management
- Integrated Corridor Management
- Active Traffic Management
- Connected Vehicles
- Autonomous Vehicles
- Truck Bypass
- Incident Management
- Weather Management
- Work Zone
- Traveler Information
- Electronic Payment/Tolling
- Transit Services
- Transit Infrastructure
- Active Transportation
- Complete Streets
- Shared Mobility

Traveler Response

- Pre-Trip Route Diversion
- En-Route Diversion
- Mode Shift
- Departure Time Choice
- Destination Change
- Induced Demand
- Foregone Demand

Facility Type

- Freeway
- High-Occupancy Vehicle Lane
- Interchange
- Express Lane
- Managed Lane
- Highway
- Arterial
- Roundabout
- Isolated Intersection
- Freeway Connector
- Ramp
- Auxiliary Lane
- Reversible Lane
- Truck Lane
- Toll Plaza
- Rail
- Bus Lane
- Bicycle
- Pedestrian

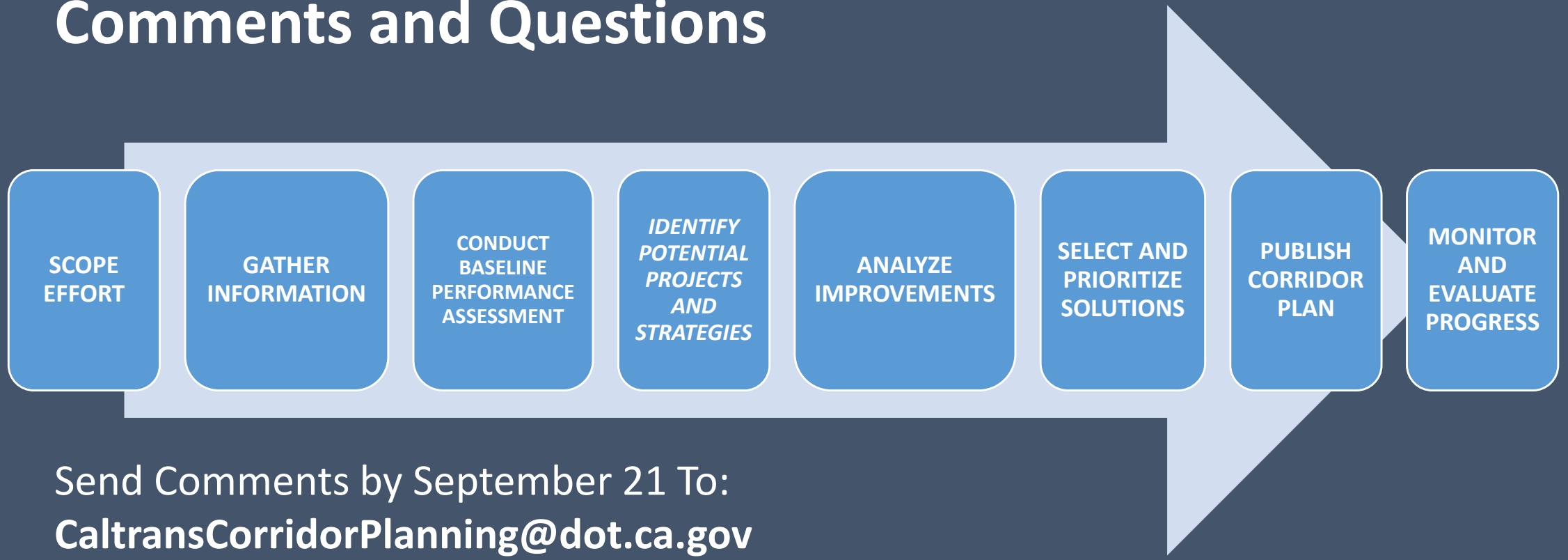
Response Timeframe

- Real-Time Response
- Longer-Term Response

Performance Measure

- Delay
- Bottleneck/Queue Location & Extent
- Travel Time
- Travel Time Reliability
- Throughput/Volume
- Speed
- Level of Service (LOS)
- Transit Ridership
- Service Frequency
- Injury and Fatality Crashes
- Bicycle and Pedestrian Collisions
- Crash Rates
- Reduced Safety Conflicts
- Access or System Connectivity
- Truck Hours of Delay
- Truck Travel Time Reliability
- Job Access
- Disadvantaged Population Served
- GHG
- Air Pollutants
- Vehicle Miles Traveled (VMT)
- Fuel Consumption
- Noise
- Mode Share
- Jobs/Housing Ratio
- Benefit/Cost

Caltrans Corridor Planning Guidebook: Comments and Questions



Send Comments by September 21 To:
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